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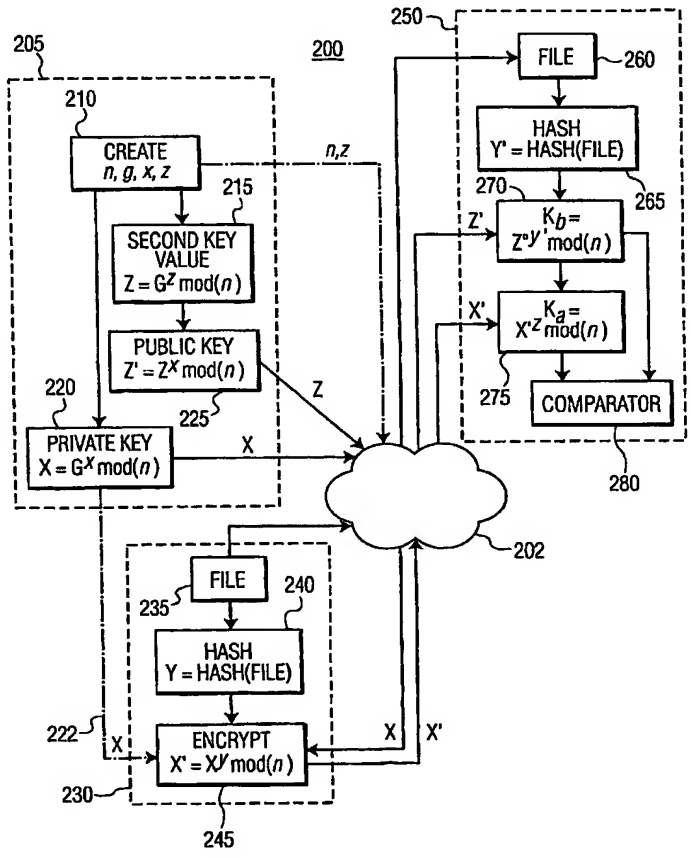
(54) Title: GENERATION AND VALIDATION OF DIFFIE-HELLMAN DIGITAL SIGNATURES



(57) Abstract: In one embodiment, a device for decoding digital signatures to validate the source of received information items is disclosed. The device is operable to determine a first comparator value in relation to a first value associated with information items received over a network and a Diffie-Hellman public key, determine a second comparator value in relation to a digital signature received, wherein the digital signature is determined in association with a second value associated with the information items prior to transmission over said network, and comparing the first and second comparator values to validate the source based on the comparison. In another embodiment, a key generating device is operable to generate a first and second Diffie-Hellman key from a plurality of large numbers randomly selected, wherein at least one of the numbers is a prime number, and further determine a public key as a Diffie-Hellman transpose of one of the generated first and second Diffie-Hellman keys.

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